ATTORNEYS

RECEIVED

MAY 24 2013

PUBLIC SERVICE COMMISSION

421 West Main Street Post Office Box 634 Frankfort, KY 40602-0634 [502] 223-3477 [502] 223-4124 Fax www.stites.com

Kenneth J Gish, Jr (859) 226-2293 (859) 425-7996 FAX kgish@stites.com

# HAND DELIVERED

May 24, 2013

Jeff R. Derouen Executive Director Public Service Commission 211 Sower Boulevard P.O. Box 615 Frankfort, KY 40602-0615

RE: Case No. 2013-00144

Dear Mr. Derouen:

Enclosed please find and accept for filing the original and ten copies of Kentucky Power Company's responses to the requests for information propounded by Commission Staff, Kentucky Industrial Utility Customers, Inc., and the Office of the Attorney General.

A copy of this letter and the Company's responses is being served on the individuals indicated below and their associated counsel.

Please do not hesitate to contact me if you have any questions.

Sincerely

Kenneth J. Gish, Jr.

KG1 Enclosures

cc: Michael L. Kurtz

Jennifer Black Hans

22768:1:FRANKFORT

Alexandria, VA Atlanta, GA Frankfort, KY Franklin, TN Jeffersonville, IN Lexington, KY Louisville, KY Nashville, TN

# RECEIVED

# COMMONWEALTH OF KENTUCKY

MAY 24 2013

# BEFORE THE PUBLIC SERVICE COMMISSION

PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF KENTUCKY POWER COMPANY FOR )
APROVAL OF THE TERMS AND CONFITIONS OF THE )
RENEWABLE ENERGY PURCHAS AGREEMENT FOR )
BIOMASS ENERGY RESOURCES BETWEEN THE )
COMPANY AND ECOPOWER GENERATION-HAZARD )
LLC; AUTHORIZATION TO ENTER INTO THE )
AGREEMENT; GRANT OF CERTAIN DECLARATORY )
RELIEF; AND GRANT OF ALL OTHER REQUIRED )
APPROVALS AND RELIEF

Or her from

Case No. 2013-00144

KENTUCKY POWER COMPANY RESPONSES TO
COMMISSION STAFF'S FIRST SET OF DATA REQUESTS

## VERIFICATION

The undersigned, Gregory G. Pauley, being duly sworn, deposes and says he is the President and Chief Operating Officer for Kentucky Power Company, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief

COMMONWEALTH OF KENTUCKY )
CASE NO. 2013-00144
COUNTY OF FRANKLIN

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Gregory G. Pauley, this the 17th day of May 2013.

My Commission Expires: Januar

Hotary Public K. Rosqueit

# VERIFICATION

The undersigned, Jay F. Godfrey, being duly sworn, deposes and says he is the Managing Director for Renewable Energy, for American Electric Power Service Corporation and he has personal knowledge of the matters set forth in the forgoing responses for which he is identified as the witness and that the information contained therein is true and correct to the best of his information, knowledge and belief.

Jay F. Godfrey

STATE OF OHIO

COUNTY OF FRANKLIN

CASE NO. 2013-144

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Jay F. Godfrey, this the 22 day of May, 2013.

Notary Public

My Commission Expires: Manag 4,2014

ARIAL S

Donna J. Stephens Notary Public, State of Ohio My Commission Expires 01-04-2014

# VERIFICATION

The undersigned, Ranie K. Wohnhas, being duly sworn, deposes and says he is the Managing Director Regulatory and Finance for Kentucky Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief

	Kane K. Wahnel
	Ranie K. Wohnhas
COMMONWEALTH OF KENTUCKY	)
COUNTY OF FRANKLIN	) CASE NO. 2013-00144 )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the 172 day of May 2013.

Judy M. Rosquist 481393 Notary Public

My Commission Expires: January 33,3017

KPSC Case No. 2013-00144
PSC First Set of Data Requests
Dated May 10, 2013
Item No. 1
Page 1 of 2

# **Kentucky Power Company**

# REQUEST

Refer to page 5 of the application, paragraph 11.

- a. Kentucky Power estimates, based on 2012 jurisdictional revenues, that its revenue requirement would increase by approximately 7 percent in the first year of the Renewable Energy Power Agreement ("REPA"). The term of the REPA is 20 years. Provide an estimate of the approximate increase in Kentucky Power's revenue requirement for each year of the 20-year term.
- b. This paragraph states that "the REPA could also result in an increase in the Company's cost of capital depending on regulatory treatment and other factors."
  - i. State whether the increase in the cost of capital referred to in this statement is related to the treatment of the REPA by the credit rating agencies discussed in the application and testimony.
  - ii. Identify the "other factors" referenced in the statement.
- c. This paragraph also states that the contract price will escalate by a fixed percentage each year during the term of the agreement. Explain whether the escalation rate is a standard rate for such contracts.
- d. This paragraph further states that "[i]f the EcoPower facility qualifies for the Section 45 Production Tax Credit the Contract Price will be adjusted downward."
  - i. When will it be known whether the facility qualifies for the tax credit?
  - ii. If the facility qualifies for the tax credit, for how long will the tax credit be in effect?
  - iii. Provide an estimate of the downward adjustment to the contract price if the facility qualifies for the tax credit.

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## RESPONSE

a. Based on 2012 jurisdictional revenues, the estimated year over year incremental increase would grow from .25% in year two to .39% in year 20. This would result in an approximate 13% increase over the 20 year period. The actual year by year percent is as follows:

Year 225%	Year 1132%
Year 326%	Year 1232%
Year 427%	Year 1333%
Year 527%	Year 1434%
Year 628%	Year 1535%
Year 729%	Year 1636%
Year 829%	Year 1737%
Year 930%	Year 1838%
Year 1031%	Year 1938%
	Year 2039%

- b. (i) The increase in the cost of capital referenced in this paragraph is related to the possible treatment of imputed debt by credit rating agencies if concurrent recovery through a rider or surcharge is not authorized by this Commission.
  - (ii) See (i) above.
- c. Yes, an escalation rate is a common feature in long-term PPAs.
- d. (i.) It will be known by the end of 2013 whether the facility qualifies for the tax credit.
  - (ii.) If the facility qualifies for the tax credit, the credit will be in effect for 10 years.
  - (iii.) The downward adjustment to the contract price if the facility qualifies for the tax credit is estimated to be \$5-\$10/MWh during the term of the credit.

WITNESS: Ranie K. Wohnhas/Jay F. Godfrey

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# **Kentucky Power Company**

# REQUEST

Refer to pages 7-8 and 10 of the application, paragraphs 17-20 and 27, concerning renewable portfolio standards.

- a. Provide a more detailed explanation supporting Kentucky Power's belief of the high likelihood of a renewable portfolio standard being enacted in Kentucky within the 20-year term of the REPA.
- b. Of the 37 states and the District of Columbia that have either implemented a renewable portfolio standard or implemented renewable portfolio goals, identify which of those 38 jurisdictions no longer have a traditional cost-based regulatory environment such as exists in Kentucky.

# RESPONSE

- a. The Company has no further explanation other than described in the referenced pages and paragraphs.
- b. Each of the 17 jurisdictions that have competitive markets also have an RPS standard or goal in place. The jurisdictions are:

Arizona, Connecticut, D.C., Delaware, Illinois, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island and Texas.

The other 21 states with an RPS standard or goal have traditional cost-of-service regulation.

WITNESS: Gregory G Pauley

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# **Kentucky Power Company**

# REQUEST

Refer to pages 14-15 of the application, paragraph 50, which states that Kentucky Power anticipates seeking approval of a rider or surcharge to base rates as part of its next base rate case.

- a. When does Kentucky Power anticipate filing its next base rate case?
- b. Explain why Kentucky Power anticipates that it will seek approval of a rider or surcharge, as opposed to including the REPA costs in base rates in a base rate application timed to coincide with when the facility becomes operational.

# RESPONSE

- a. The Company currently plans on filing its next base rate case on June 28, 2013 with a test year of Twelve Months Ended March 31, 2013.
- b. Assuming the Commission approves the REPA as filed which includes the initial rate per kWh and an annual escalation factor, the Company believes the use of a rider or surcharge to pass through those costs when the facility is operational is the most efficient way to implement these costs. A rider or surcharge that provides for concurrent recovery will also reduce the risk the REPA will be treated as imputed debt on the Company's books.

WITNESS: Ranie K Wohnhas

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# **Kentucky Power Company**

# REQUEST

Refer to page 6 of the Testimony of Jay F. Godfrey ("Godfrey Testimony") relating to the interconnection point at Kentucky Power's Engle substation, which is located approximately 1.4 miles from the EcoPower generating facility.

- a. Identify all loads that would be affected after the EcoPower generating facility is interconnected to Kentucky Power's Engle substation.
- b. Provide the load flow analysis using a system one-line diagram to show the percent voltage rise and MVA loading on lines and transformers in this area before and after interconnections for normal or no-contingency conditions under summer and winter peak system load conditions for the study period selected by PJM.
- c. Provide the load flow analysis using a system one-line diagram to show the percent voltage rise and MVA loading on lines and transformers in this area during the worst outage contingency conditions for summer and winter peak system load conditions for the study period selected by PJM.
- d. Provide a list of any low voltages or any overloads that may impact Kentucky Power's load due to the EcoPower's generation interconnection in this area.

# RESPONSE

a-d The requested information is the subject of the PJM System Impact Study for the ecoPower Interconnection Request (queue: Y2-086) which has not been completed by PJM. The study is expected to be completed later this year. To date, the Feasibility Study has been completed and is attached for reference as KPSC 1-4 Confidential Attachment 1. Additional details regarding the status of the Interconnection Request can be viewed at the PJM website at: http://www.pjm.com/planning/generation-interconnection/generation-queue-active.aspx.

WITNESS: Jay F Godfrey

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# Generation Interconnection Feasibility Study Report

For

PJM Generation Interconnection Request Queue Position Y2-086

Engle 69 kV

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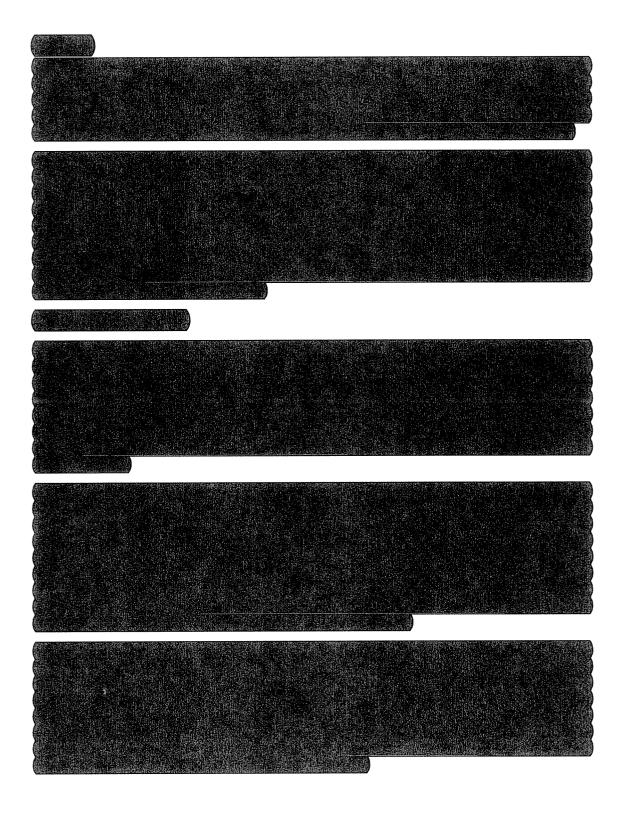
## Preface

The intent of the feasibility study is to determine a plan, with ballpark cost and construction time estimates, to connect the subject generation to the PJM network at a location specified by the Interconnection Customer. The Interconnection Customer may request the interconnection of generation as a capacity resource or as an energy-only resource. As a requirement for interconnection, the Interconnection Customer may be responsible for the cost of constructing: (1) Direct Connections, which are new facilities and/or facilities upgrades needed to connect the generator to the PJM network, and (2) Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM system.

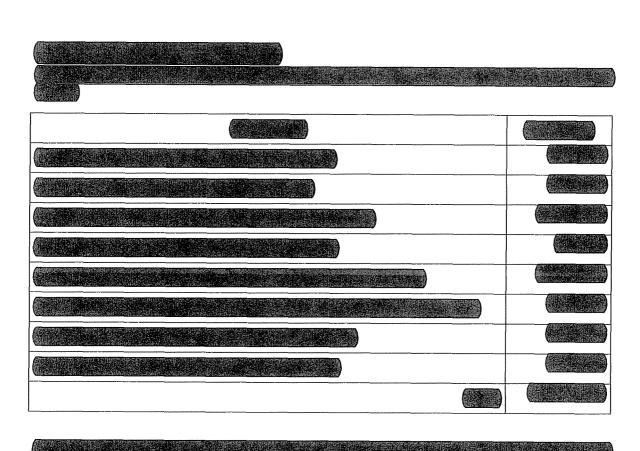
In some instances a generator interconnection may not be responsible for 100% of the identified network upgrade cost because other transmission network uses, e.g. another generation interconnection, may also contribute to the need for the same network reinforcement. The possibility of sharing the reinforcement costs with other projects may be identified in the feasibility study, but the actual allocation will be deferred until the impact study is performed.

The Feasibility Study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. The project developer is responsible for the right of way, real estate, and construction permit issues. For properties currently owned by Transmission Owners, the costs may be included in the study.

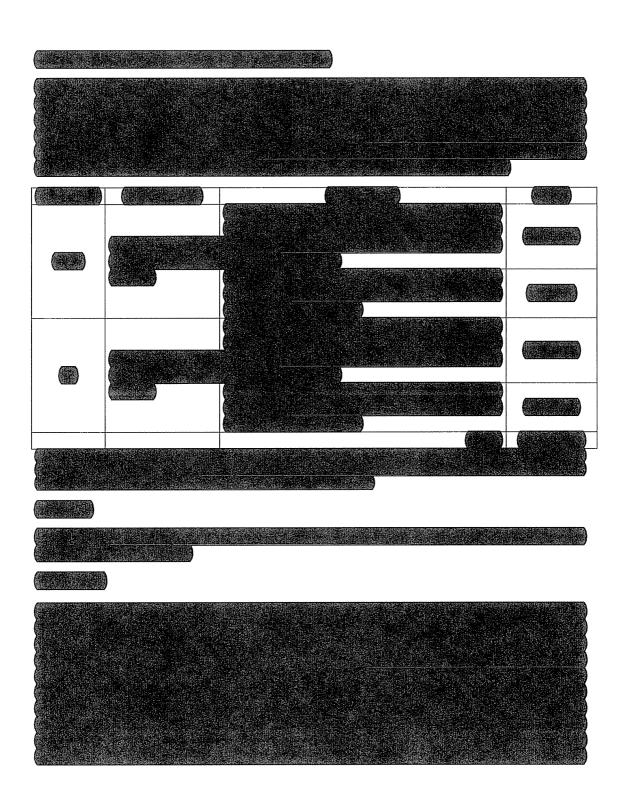
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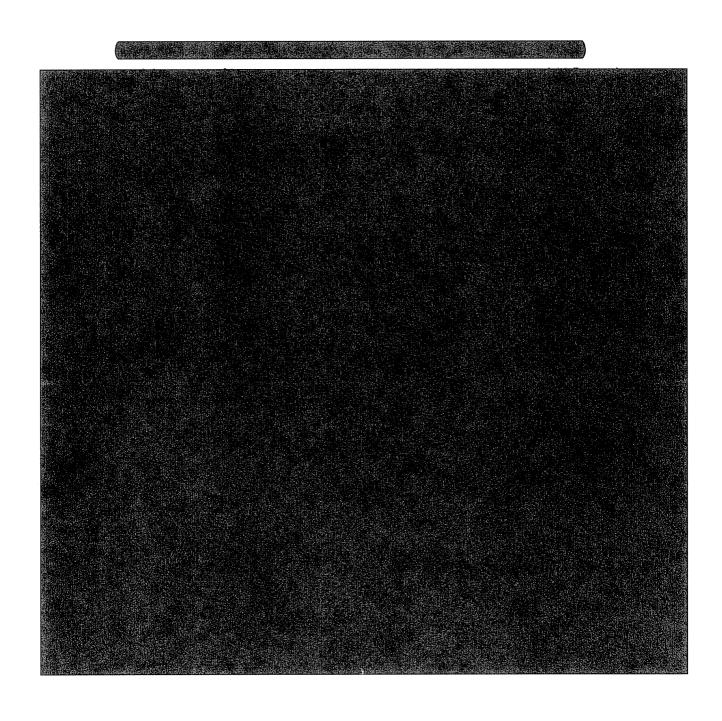
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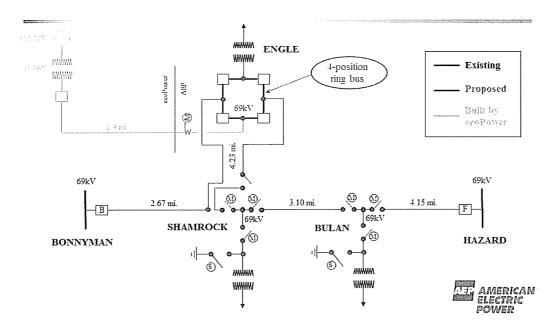


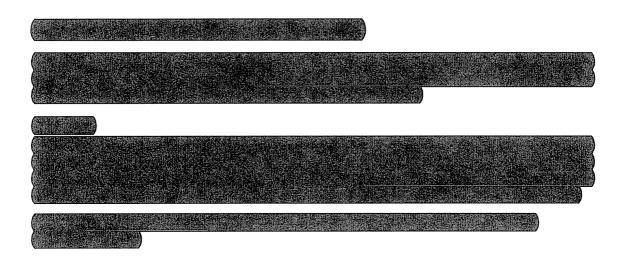


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Exhibit 2: Simplified diagram of proposed 138 kV interconnection

# **Proposed One Line Diagram**





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# **Network Impacts**

The Queue Project #Y2-086 was studied as a 62.5MW (Capacity 62.5MW) injection at the Engle 69 kV substation in the AEP area. Project #Y2-086 was evaluated for compliance with reliability criteria for summer peak conditions in 2016. Potential network impacts were as follows:

## **Generator Deliverability**

(Single or N-1 contingencies for the Capacity portion only of the interconnection)

None

# **Light Load Analysis**

Not Applicable

# **Multiple Facility Contingency**

(Double Circuit Tower Line, Line with Failed Breaker and Bus Fault contingencies for the full energy output)

1. The 05SALTV1 05BROADF 138 kV line (from bus 242788 to bus 242566 ckt 1) loads from 97.35% to 97.59% (AC power flow) of its emergency rating (251 MVA) for the line fault with failed breaker contingency outage of CONTINGENCY DESCRIPTION ('1528\_C2'). This project contributes approximately 3.68 MW to the thermal violation.

# CONTINGENCY '1528\_C2'

OPEN BRANCH FROM BUS 242510 TO BUS 242511 CKT 1 / 242510 05BAKER 765-242511-05BROADF 765-1
OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4 / 242511 05BROADF 765 242518 05BROADF 500-4
OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 / 242518 05BROADF 500 360106 8SULLIVAN TN 500-1
-END

Please refer to Appendix 1 for a table containing the generators having contribution to this flowgate.

### Short Circuit

(Summary form of Cost allocation for breakers will be inserted here if any)

No Overdutied Breakers Identified

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# **Contribution to Previously Identified Overloads**

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

1. The 05SALTV2-05BROADF 138 kV line (from bus 242789 to bus 242566 ckt 1) loads from 103.79% to 104.04% (AC power flow) of its emergency rating (203 MVA) for the line fault with failed breaker contingency outage of CONTINGENCY DESCRIPTION ('1528\_C2'). This project contributes approximately 3.17 MW to the thermal violation.

# CONTINGENCY '1528\_C2' OPEN BRANCH FROM BUS 242510 TO BUS 242511 CKT 1 / 242510 05BAKER 765 242511 05BROADF 765 1 OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4 / 242511 05BROADF 765 242518 05BROADF 500 4 OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 / 242518 05BROADF 500 360106 8SULLIVAN TN 500 1 END

- Please refer to Appendix 2 for a table containing the generators having contribution to this flowgate.
- 2. The 05CLNCHR 05LEBANO 138 kV line (from bus 242605 to bus 242700 ckt 1) loads from 108.79% to 110.3% (AC power flow) of its emergency rating (384 MVA) for the single line contingency outage of CONTINGENCY DESCRIPTION ('5296\_B2\_TOR97B\_MOAB'). This project contributes approximately 5.56 MW to the thermal violation.

# CONTINGENCY '5296\_B2\_TOR97B\_MOAB' OPEN BRANCH FROM BUS 242605 TO BUS 242606 CKT 1 / 242605 05CLNCHR-138 242606 05CLNLFD 138-1 OPEN BRANCH FROM BUS 242606 TO BUS 242639 CKT 1 / 242606 05CLNLFD 138 242639 05FLETCH 138-1 OPEN BRANCH FROM BUS 242606 TO BUS 242868 CKT 1 / 242606 05CLNLFD 138 242868 CLNCHFLD 69.0-1 -END

- Please refer to Appendix 3 for a table containing the generators having contribution to this flowgate.
- 3. The 05ELKGAZ-05SALTV1 138 kV line (from bus 246766 to bus 242788 ckt 1) loads from 111.85% to 113.64% (AC power flow) of its normal rating (296 MVA) for non-contingency condition. This project contributes approximately 5.34 MW to the thermal violation.

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- Please refer to Appendix 4 for a table containing the generators having contribution to this flowgate.
- 4. The 05LEBANO 05ELKGAZ 138 kV line (from bus 242700 to bus 246766 ckt 1) loads from 116.96% to 118.75% (AC power flow) of its normal rating (296 MVA) for non-contingency condition. This project contributes approximately 5.34 MW to the thermal violation.
- Please refer to Appendix 5 for a table containing the generators having contribution to this flowgate.
- 5. The 05ELKGAZ 05SALTV1 138 kV line (from bus 246766 to bus 242788 ckt 1) loads from 115.97% to 117.56% (AC power flow) of its emergency rating (384 MVA) for the single line contingency outage of CONTINGENCY DESCRIPTION ('05BROADF\_8SULLIVAN TN\_104'). This project contributes approximately 6.11 MW to the thermal violation.

CONTINGENCY '05BROADF\_8SULLIVAN TN\_104'
-DISCONNECT BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 /\* 500/500KV,
AREA 205/347.
-END

- Please refer to Appendix 6 for a table containing the generators having contribution to this flowgate.
- 6. The 05ELKGAZ 05SALTV1 138 kV line (from bus 246766 to bus 242788 ckt 1) loads from 115.97% to 117.56% (AC power flow) of its emergency rating (384 MVA) for the single line contingency outage of CONTINGENCY DESCRIPTION ('1375\_B3'). This project contributes approximately 6.11 MW to the thermal violation.

# CONTINGENCY '1375\_B3'

OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4 / 242511 05BROADF 765 242518 05BROADF 500 4 OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 / 242518 05BROADF 500 360106 8SULLIVAN TN 500 1 - END

- Please refer to Appendix 7 for a table containing the generators having contribution to this flowgate.
- 7. The 05CLNCHR-05LEBANO 138 kV line (from bus 242605 to bus 242700 ckt 1) loads from 120.88% to 122.68% (AC power flow) of its normal rating (296 MVA) for non-contingency condition. This project contributes approximately 5.34 MW to the thermal violation.

Please refer to Appendix 8 for a table containing the generators having contribution to this flowgate.

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8. The 05CLNCHR-05LEBANO 138 kV line (from bus 242605 to bus 242700 ckt 1) loads from 120.48% to 120.74% (AC power flow) of its emergency rating (384 MVA) for the bus fault outage of CONTINGENCY DESCRIPTION ('1375\_C1'). This project contributes approximately 6.11 MW to the thermal violation.

### CONTINGENCY '1375 C1'

OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4 / 242511 05BROADF 765 242518 05BROADF 500 4 OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 / 242518 05BROADF 500 360106 8SULLIVAN TN 500 1 - END

Please refer to Appendix 9 for a table containing the generators having contribution to this flowgate.

9. The 05LEBANO 05ELKGAZ 138 kV line (from bus 242700 to bus 246766 ckt 1) loads from 119.95% to 121.54% (AC power flow) of its emergency rating (384 MVA) for the single line contingency outage of CONTINGENCY DESCRIPTION ('1375\_B3'). This project contributes approximately 6.11 MW to the thermal violation.

### **CONTINGENCY '1375-B3'**

OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4 / 242511 05BROADF 765 242518 05BROADF 500 4 OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 / 242518 05BROADF 500 360106 8SULLIVAN TN 500 1 - END

-Please refer to Appendix 10 for a table containing the generators having contribution to this flowgate.

10. The 05LEBANO 05ELKGAZ 138 kV line (from bus 242700 to bus 246766 ckt 1) loads from 119.95% to 121.54% (AC power flow) of its emergency rating (384 MVA) for the single line contingency outage of CONTINGENCY DESCRIPTION ('05BROADF\_8SULLIVAN TN\_104'). This project contributes approximately 6.11 MW to the thermal violation.

# CONTINGENCY '05BROADF 8SULLIVAN TN 104'

DISCONNECT BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 /\* 500/500KV, AREA 205/347.

-END

Please refer to Appendix 11 for a table containing the generators having contribution to this flowgate.

11. The 05ELKGAZ 05SALTV1 138 kV line (from bus 246766 to bus 242788 ckt 1) loads from 131.76% to 132.02% (AC power flow) of its emergency rating (384 MVA) for the line fault with

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failed breaker contingency outage of CONTINGENCY DESCRIPTION ('1528\_C2'). This project contributes approximately 6.01 MW to the thermal violation.

# CONTINGENCY '1528\_C2' OPEN BRANCH FROM BUS 242510 TO BUS 242511 CKT 1 /242510 05BAKER 765-242511 05BROADF 765-1 OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4 /242511 05BROADF 765-242518 05BROADF 500-4 OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1 /242518 05BROADF 500-360106 8SULLIVAN TN 500-1 END

Please refer to Appendix 12 for a table containing the generators having contribution to this flowgate.

12. The 05LEBANO-05ELKGAZ 138 kV line (from bus 242700 to bus 246766 ckt 1) loads from 135.65% to 135.9% (AC power flow) of its emergency rating (384 MVA) for the line fault with failed breaker contingency outage of CONTINGENCY DESCRIPTION ('1528\_C2'). This project contributes approximately 6.01 MW to the thermal violation.

CONTINGENCY '1528 C2'	
OPEN BRANCH FROM BUS 242510 TO BUS 242511 CKT 1	/ 242510 05BAKER
765 242511 05BROADF 765 1	
OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4	/ 242511
05BROADF 765 242518 05BROADF 500 4	
OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1	/ 242518
05BROADF 500 360106 8SULLIVAN TN 500 1	
END	

Please refer to Appendix 13 for a table containing the generators having contribution to this flowgate.

13. The 05CLNCHR-05LEBANO 138 kV line (from bus 242605 to bus 242700 ckt 1) loads from 138.65% to 138.9% (AC power flow) of its emergency rating (384 MVA) for the line fault with failed breaker contingency outage of CONTINGENCY DESCRIPTION ('1528\_C2'). This project contributes approximately 6.01 MW to the thermal violation.

CONTINGENCY '1528_C2'	
OPEN BRANCH FROM BUS 242510 TO BUS 242511 CKT 1	/ 242510 05BAKER
765 242511 05BROADF 765 1	
OPEN BRANCH FROM BUS 242511 TO BUS 242518 CKT 4	/ 242511
05BROADF 765 242518 05BROADF 500 4	
OPEN BRANCH FROM BUS 242518 TO BUS 360106 CKT 1	/ 242518
05BROADF 500 360106 8SULLIVAN TN 500 1	
END	

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Please refer to Appendix 14 for a table containing the generators having contribution to this flowgate.

# **Steady-State Voltage Requirements**

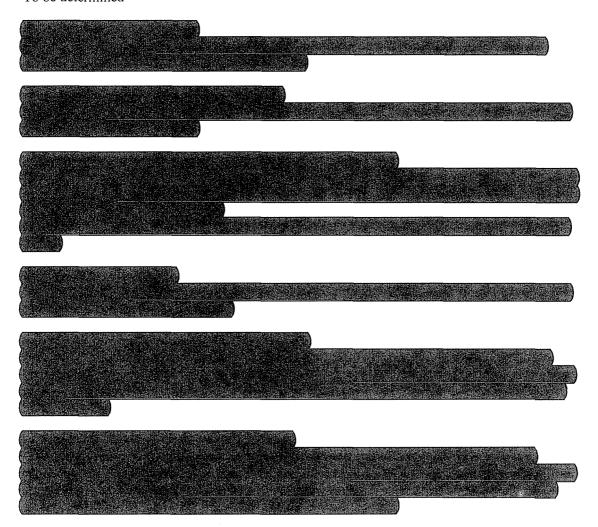
(Results of the steady-state voltage studies should be inserted here)

To be determined

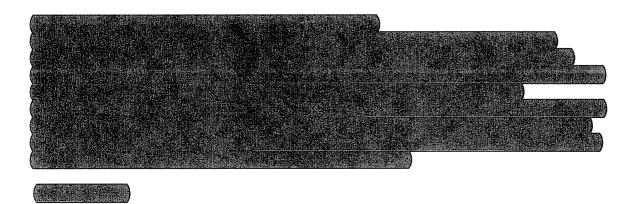
# Stability and Reactive Power Requirement

(Results of the dynamic studies should be inserted here)

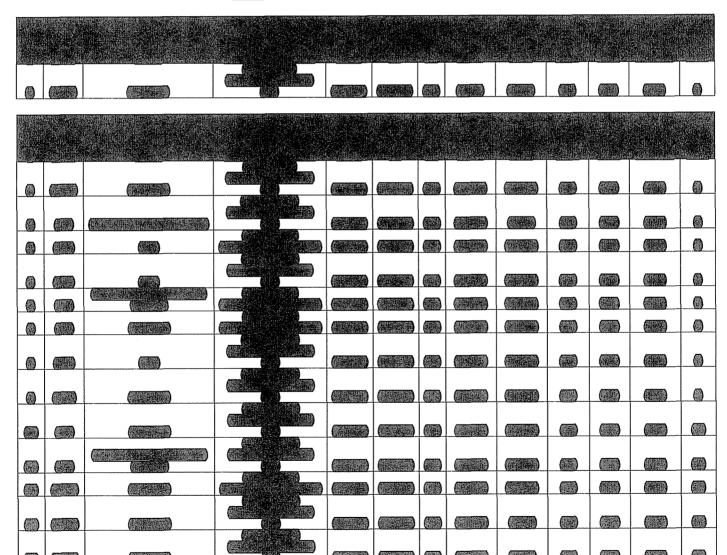
To be determined



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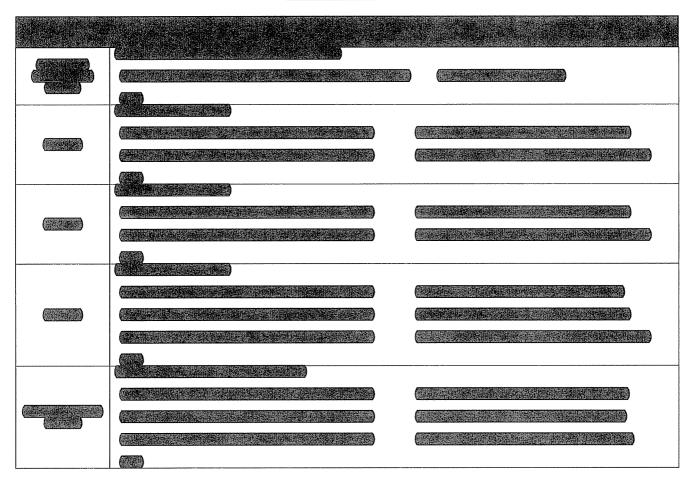


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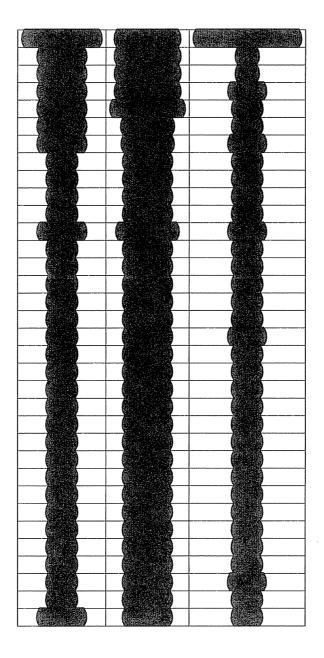
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# 18 Septimen



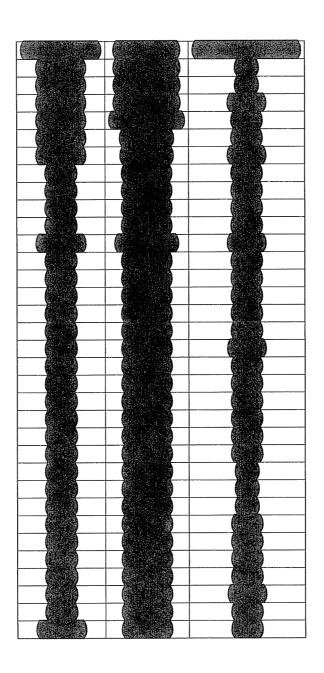
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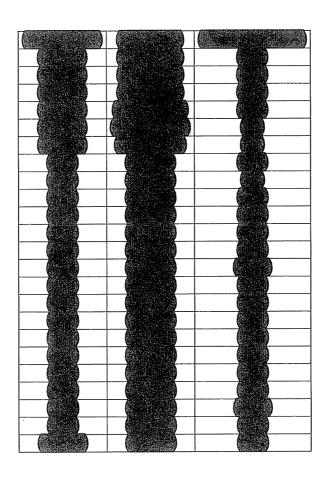
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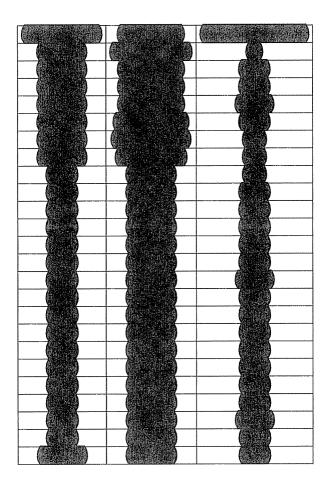
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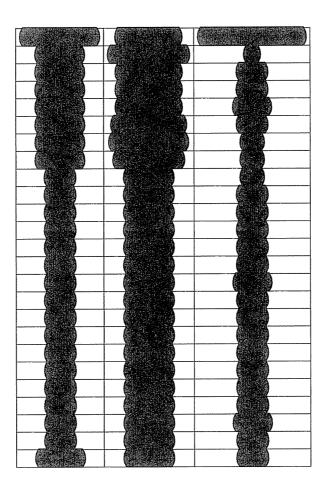
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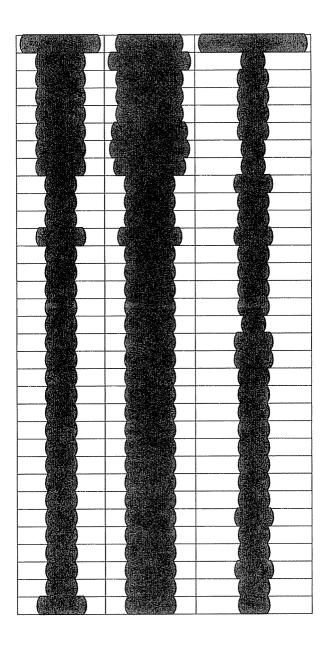
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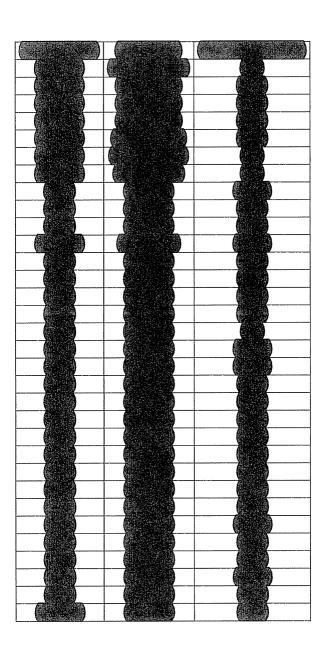
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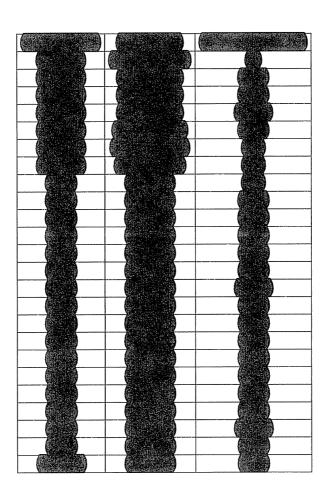
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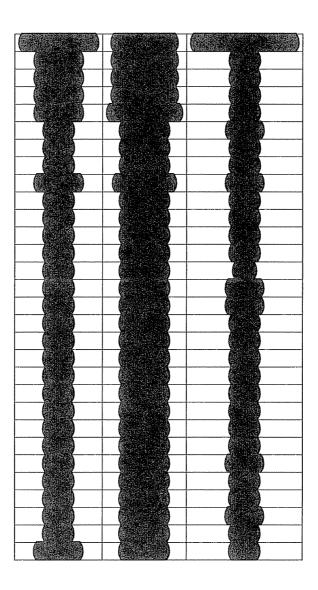
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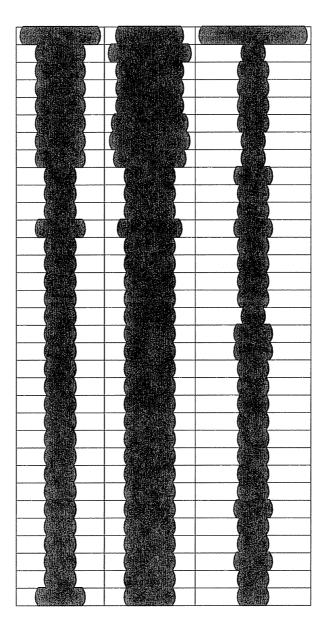
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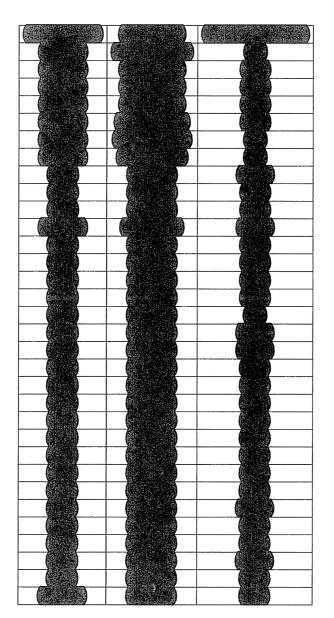
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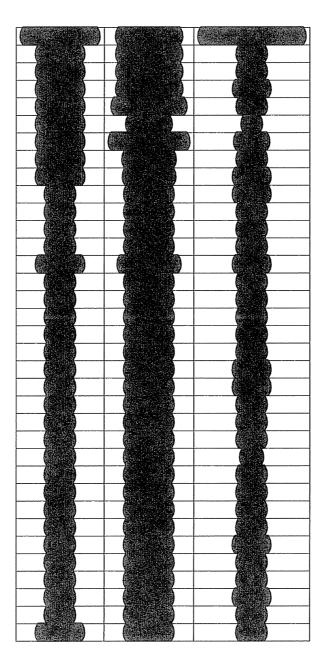
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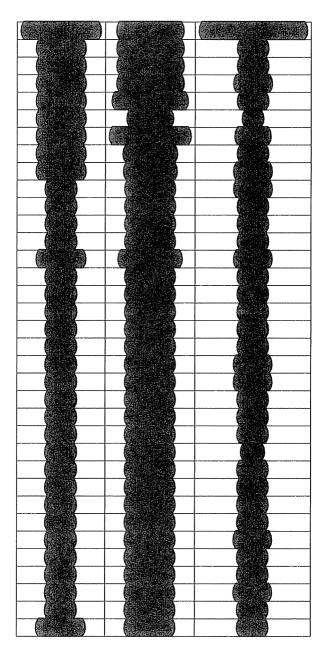
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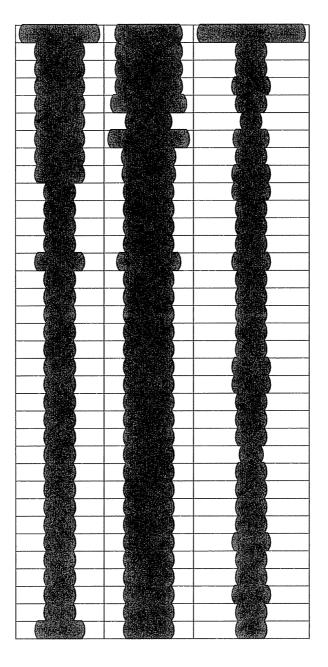
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## **Kentucky Power Company**

### REQUEST

Refer to pages 11-12 of the Godfrey Testimony. Starting at the bottom of page 11, Mr. Godfrey states that Kentucky Power may sell the renewable energy credits ("REC") in the short-term and credit any proceeds to customers. State the current value of an REC from the type of biomass facility described in the application.

#### RESPONSE

Information currently obtained from SNL Financial LC indicates a REC value of \$2-\$6.

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## **Kentucky Power Company**

### REQUEST

Refer to page 12 of the Godfrey Testimony. Starting at line 8, Mr. Godfrey states that "provisions in Section 6.1 require ... approvals by the Commission and FERC of the Mitchell Unit transfer transaction..." I Also refer to Exhibit JFG-1, pages 12-13 of 88, on which a "Commission Approval Order" is defined as being a nonappealable order "granting without modification or condition all approvals required to accomplish the Mitchell Transaction.." among other requirements. Explain why the execution of the REPA depends on unmodified and unconditional approval of the Mitchell transaction.

#### RESPONSE

The Company needs to have the approval of the Mitchell transaction to cover its base load capacity and energy requirements for the next 27 years. The biomass facility would be a very small addition that only assists with the Company's total capacity and energy needs after the Company's base load is covered by the Mitchell transfer. Without the unconditional approval of the Mitchell transaction, the Company would need to re-evaluate in its entirety how it will cover its capacity and energy requirements.

WITNESS: Gregory G Pauley

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### **Kentucky Power Company**

#### REQUEST

Refer to page 4 of the Testimony of Gregory G. Pauley ("Pauley Testimony") concerning the decision to enter into the EcoPower REPA. Provide a detailed description of the genesis of this decision, including a thorough discussion of the factors that prompted Kentucky Power to enter into the REPA, and whether there is a need for such power.

#### RESPONSE

The Company was approached by ecoPower in late 2010 regarding the proposed biomass facility in Perry County. During these discussions, ecoPower informed current Kentucky Power management that it previously had approached prior Kentucky Power management concerning the opportunity. Current Kentucky Power management is unaware of, and has no documentation regarding, the previous discussions. At the conclusion of these late 2010 discussions, the Company recognized the economic development potential of the project, but was cautious of the cost associated with renewables and the potential for recovery. Kentucky Power recommended that ecoPower seek a Renewable Portfolio Standard (RPS) that would make its project more attractive.

In 2011, Kentucky Power was approached by ecoPower concerning the transaction. At the time Kentucky Power alerted ecoPower that any agreement would require appropriate regulatory, and contractual safeguards to ensure the Company would receive full and timely cost recovery during the entire term of the REPA. ecoPower later presented the Company with proposed cost recovery statutory language it planned to submit during the 2012 legislative process. The Company took no position with respect to the proposed legislative language. Thereafter, Kentucky Power began preliminary contract discussions with ecoPower. At that time, ecoPower did not have financing for the project. Kentucky Power was also evaluating options for the disposition of its Big Sandy Plant. Negotiations were terminated when the parties could not agree on the safeguards to ensure the Company would receive full and timely cost recovery during the term of the REPA.

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Contract negotiations with ecoPower recommenced in 2012 when ecoPower again approached Kentucky Power with proposed cost recovery language. Kentucky Power again took no position with respect to the proposed language. ecoPower's proposed bill was introduced in the 2013 Session of the General Assembly and enacted into law as Senate Bill 46.

Negotiations continued through March 2013. After evaluating the financial and accounting impacts of the REPA, as well the economic development and fuel diversity benefits of the project, Kentucky Power executed the REPA on March 15, 2013. Entering into the REPA gives the Company flexibility to meet future load growth, supports economic development in its service area, and diversifies its generation portfolio.

WITNESS: Gregory G Pauley

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# **Kentucky Power Company**

### REQUEST

Refer to Exhibit JFG-1, page 73 of 88, and the Pauley Testimony. Exhibit JFG-1 shows the construction start date to be May 23, 2013. Page 5 of the Pauley Testimony, lines 15-16, states that construction is expected to begin in 2014. Clarify the date that construction is expected to begin.

#### RESPONSE

Construction work for the Chipper Building began on April 22, 2013. Major facility construction is expected to begin in 2014.

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# **Kentucky Power Company**

#### REQUEST

Refer to the reference on pages 6-7 of the Pauley Testimony to the Commission's rejection of Kentucky Power's previous proposal to enter into a wind-power contract and the reasons in support of the proposed biomass power contract.

- a. Explain whether the evaluation performed on behalf of Kentucky Power of the ecoPower biomass-fueled generation project is the first evaluation of a biomass-fueled generation project performed by or for Kentucky Power.
- b. If the answer to a. is no, provide the results of the prior evaluation, the date it was performed, and a narrative explanation of why Kentucky Power did not pursue that project.

### RESPONSE

- a. Yes, the evaluation performed on behalf of KPCo of the ecoPower biomass-fueled generation project is the first evaluation of a biomass-fueled generation project performed by or for KPCo.
- b. Not Applicable.

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# **Kentucky Power Company**

### **REQUEST**

Refer to page 7, lines 7 through 9, of Pauley Testimony, which state "[w]ith the upcoming termination of the Pool Agreement, the Company will no longer have ready access to low-cost energy and capacity from the Pool." Provide the number of hours, during the 12 months ending April 30, 2013, when the price of energy and capacity from the PJM market is greater than the price reflected in the proposed REPA.

#### **RESPONSE**

During the 12 months ended April 30, 2013, the number of hours that the price of energy and capacity from the PJM market was greater than the price reflected in the proposed REPA was 75 hours.

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# **Kentucky Power Company**

### REQUEST

Refer to page 7 of the Pauley Testimony, lines 12-19. Provide any economic studies or analyses that have been performed in connection with the ecoPower biomass generating facility by Kentucky Power, American Electric Power ("AEP"), any AEP subsidiaries or affiliates, by ecoPower.

#### RESPONSE

Neither Kentucky Power, American Electric Power ("AEP") or any AEP subsidiary or affiliate has performed any economic studies or analyses in connection with the ecoPower biomass generating facility.

WITNESS: Gregory G Pauley

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### **Kentucky Power Company**

### REQUEST

Refer to Exhibit RKW-1 of the Ranie K. Wohnhas Testimony. Provide the supporting calculations for the Avoided Fuel Costs of \$12,780,000 and Avoided Capacity Costs of \$2,730,000.

#### RESPONSE

Avoided Fuel Costs - 450,000 MWH \* 28.4 m/kWh; Avoided Capacity Costs - 58.5MW \* .94 EFOR \* \$136 RPM Auction Clearing Price 2015/16 \* 365

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# **Kentucky Power Company**

# REQUEST

Provide the expected capacity factor of the EcoPower biomass generating facility.

### RESPONSE

The expected capacity factor from the ecoPower provided model is 88%, which can be found in the response to KIUC 1-14.

WITNESS: Jay F Godfrey

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# **Kentucky Power Company**

### REQUEST

Provide the number of biomass facilities like the one described in the application that are owned and/or operated by EcoPower, their location, the number of years owned and/or operated by EcoPower, and the capacity factors of those facilities.

#### RESPONSE

ecoPower does not own or operate any other biomass facilities.

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## **Kentucky Power Company**

### REQUEST

Elaborate on any expectation of load growth over the next ten years and how Kentucky Power would meet this load growth.

#### RESPONSE

Kentucky Power's latest load forecast for 2013-2023 shows an approximate 0.2% compounded annual growth rate in its winter peak demand. With this level of projected growth for the next ten years the Company is currently not planning to add any further generation resources over that time period other than the biomass facility in this proceeding and the assets described in Case No. 2012-00578.

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# **Kentucky Power Company**

## **REQUEST**

Would the power from the REPA necessitate additional facility upgrades to the Kentucky Power system? If yes, provide a schedule of additional upgrades and associated costs.

### **RESPONSE**

Please see response to KPSC 1-4. Upgrade facility cost are the responsibility of ecoPower.

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# **Kentucky Power Company**

## REQUEST

Provide the most recent update of the disposition of Big Sandy Unit 1.

#### RESPONSE

The Company will be evaluating the cost to convert Big Sandy Unit 1 to gas against bids received from an RFP issued on March 28, 2013 for up to 250MW of long term capacity and energy. Responses to the RFP are due by June 11, 2013.